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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/783,071	02/20/2004	Shulong Li	5707	6282

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EXAMINER

BOYER, CHARLES I

ART UNIT	PAPER NUMBER
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1751

DATE MAILED: 05/20/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/783,071

Applicant(s)

LI ET AL

Examiner

Charles I. Boyer

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 20 February 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-44 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-44 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 12, 15, 21, 23, 34, and 36 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 10 calls for an odor-absorbing compound, but claim 12 allows for 0% of this compound, making it optional. Claim 13 calls for an aroma compound, but claim 15 allows for 0% of this compound, making it optional. Claim 20 calls for an aroma compound, but claim 21 allows for 0% of this compound, making it optional. Claim 22 calls for an odor-absorbing compound, but claim 23 allows for 0% of this compound, making it optional. Claim 33 calls for an aroma compound, but claim 34 allows for 0% of this compound, making it optional. Claim 35 calls for an odor-absorbing compound, but claim 36 allows for 0% of this compound, making it optional.

***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 2, 4, 5, 7, 43, and 44 are rejected under 35 U.S.C. 102(e) as being anticipated by Mitra et al, US 6,841,527.

Mitra et al teach aqueous cleaning compositions comprising 0.4% quaternary ammonium biocide, 1.1% potassium citrate, and the balance water (col. 28, example 11). As this reference meets all material limitations of the claims at hand, the reference is anticipatory.

4. Claims 1, 2, 4, 5, 7, 43, and 44 are rejected under 35 U.S.C. 102(b) as being anticipated by Whiteley, US 5,610,189.

Whiteley teaches a carpet cleaning composition comprising 5% benzalkonium chloride, 5.5% sodium citrate, 0.2% perfume, and the balance water (col. 6, example 4). As this reference meets all material limitations of the claims at hand, the reference is anticipatory.

5. Claims 1, 2, 4, 5, 7, 10, 12, 24, 26, 31, 32, 35-37, 39, and 41 are rejected under 35 U.S.C. 102(b) as being anticipated by Gioffre, US 4,526,583.

Gioffre teaches powdered carpet treating compositions comprising sodium borate, zeolites coated with up to 5% of a cationic surfactant, and perfume wherein the composition is applied to a carpet and is then vacuumed off (col. 9, claims 8 and 17). As

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this reference meets all material limitations of the claims at hand, the reference is anticipatory.

6. Claims 1-4, 7, 10, 12, 24, 26, 31, 32, 35-37, 39, 41, 43, and 44 are rejected under 35 U.S.C. 102(b) as being anticipated by Loudas, US 3,901,727.

Loudas teaches carpet cleaning compositions comprising 6.56% zinc oxide and 3% zinc oleate, wherein the composition is applied to a carpet, dried, and then vacuumed (col. 7, composition E and col. 14, claim 9). As this reference meets all material limitations of the claims at hand, the reference is anticipatory.

7. Claims 1, 2, 4, 5, 7, 10, 12, 24, 26, 31, 32, 35-37, 39, and 41 are rejected under 35 U.S.C. 102(b) as being anticipated by Schwalley et al, US 4,244,834.

Schwalley et al teach powdered carpet treating compositions comprising sodium tetraborate, 4% zeolites, 1% quaternary ammonium cationic surfactant, and perfume oil wherein the composition is applied to a carpet and is then vacuumed off (col. 3, example 3). As this reference meets all material limitations of the claims at hand, the reference is anticipatory.

8. Claims 1, 2, 4, 5, 7, 10, 12, 24, 26, 31, 32, 35-37, 39, and 41 are rejected under 35 U.S.C. 102(e) as being anticipated by Woo et al, US 6,833,342.

Woo et al teach a carpet deodorizing and cleaning composition comprising 5% cyclodextrin, 1% quaternary ammonium compound, and 0.3% perfume wherein the

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composition is applied with a machine carpet cleaner and vacuumed off (col. 50, example 5). As this reference meets all material limitations of the claims at hand, the reference is anticipatory.

9. Claims 1-4, 7, 10, 12, 37, 39, and 41 are rejected under 35 U.S.C. 102(b) as being anticipated by Minhas et al, US 4,061,810.

Minhas et al teach a flame retardant carpet wherein the carpet is contacted with a solution comprising 10% zinc oxide and 10% citric acid (col. 9, claims 1, 12, and 14). As this reference meets all material limitations of the claims at hand, the reference is anticipatory.

10. Claims 1, 2, 4, 5, 7, 17, 24, 27, 28, 31, 32, 37, 39, and 41 are rejected under 35 U.S.C. 102(b) as being anticipated by Froehlich et al, US 4,013,594.

Froehlich et al teach a powdered carpet cleaning composition comprising 60% urea-formaldehyde particles, 2% quaternary ammonium compound, 24% water, and lemon perfume wherein the composition is applied to a carpet, allowed to dry, and vacuumed off (col. 8, example 6 and col. 5, lines 15-52). As this reference meets all material limitations of the claims at hand, the reference is anticipatory.

### ***Claim Rejections - 35 USC § 103***

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. Claims 1-7, 18, 19, 24, 31, 32, 37-41, 43, and 44 are rejected under 35 U.S.C.

103(a) as being unpatentable over Whiteley, US 5,610,189.

Whiteley is relied upon as set forth above. Suitable biocides of the invention include hydantoins (col. 2, lines 58-64). Though the carpets cleaned with the composition of Whiteley are hung to dry for purposes of experimentation, one of ordinary skill in the art will appreciate that carpets may be dried by any suitable method, including blotting, vacuuming, and air-drying.

13. Claims 1-10, 12-16, 18-26, and 31-44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Woo et al, US 6,833,342.

Woo et al are relied upon as set forth above. Preferred deodorizing agents of the invention include an aldehyde mixture of vanillin and hexyl cinnamic aldehyde (col. 50, example 5), suitable biocides of the invention include hydantoins and chlohexidine salts (col. 32, lines 46-60), and suitable antimicrobial preservatives of the invention include 2-bromo-2-nitropropane-1, 3-diol. It would have been obvious to one of ordinary skill in the art to incorporate well known deodorants and antimicrobial compounds in the carpet cleaners of Woo et al as such components are taught as well known in the art for this purpose.

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14. Claims 1, 2, 4, 5, 7, 17, 24, 27-32, and 37-41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Froehlich et al, US 4,013,594 in view of Fleckenstein et al, US 5,783,543 and Woo et al, US 6,833,342.

Froehlich et al are relied upon as set forth above. Though Froehlich et al teach perfumes in their compositions, they do not specifically teach aldehyde perfumes. Recall that Woo et al teach aldehyde perfumes as particularly preferred perfumes for use in carpet cleaners. Froehlich et al do not specifically teach the odor-absorbing compounds set forth in present claim 30. Fleckenstein et al teach powdered carpet cleaning compositions comprising urea-formaldehyde and zeolite adsorbents (col. 6, example 6). It would have been obvious to one of ordinary skill in the art to incorporate well known deodorants and odor absorbers in the carpet cleaners of Froehlich et al as such components are taught as well known in the art for these purposes.

15. Claims 1-4, 7, 10-12, 24, 26, 31, 32, 35-37, 39, 41, 43, and 44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Loudas, US 3,901,727.

Loudas is relied upon as set forth above. Preferred zinc salts of the invention include zinc oleate and zinc ricinoleate (col. 3, lines 51-53). It would have been obvious to one of ordinary skill in the art to substitute zinc ricinoleate for the zinc oleate in composition E as these compounds are taught as functional equivalents by Loudas.



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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles I. Boyer whose telephone number is 571 272 1311. The examiner can normally be reached on M-F 9:30 to 6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Yogendra Gupta can be reached on 571 272 1316. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Charles I Boyer  
Primary Examiner  
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